Development Geology - DG

COURSE

About the Course

Successful field appraisal, development, and management requires a fundamental understanding of the reservoir pore space distribution. Participants learn, through hands-on exercises, to compile a development plan that emphasizes optimal recovery. Emphasis is placed on rock, log and test data to distinguish reservoir and non-reservoir rock properties. Structural, stratigraphic, deposition and diagenetic concepts are used to locate drill sites and describe reservoirs. The input required to construct a geologic reservoir model is reviewed. Participants learn the importance of modifying development plans as a field becomes more mature. Techniques for mature field rejuvenation are discussed through case histories.

"Course is very good, no improvement required. All topics are well covered." - Geophysicist, Oman

"I appreciated the flexibility of the course/professor to meet the needs of the class and address our specific fields/projects." - Reservoir Engineer, United States

Target Audience

Reservoir, development, and exploration geologists; geophysicists; petrophysicists; log analysts; petroleum engineers; and experienced technicians.

You Will Learn

Participants will learn how to:

- Select optimum drill sites for field development
- Use log and rock data to identify reservoir rock, non-reservoir rock, and pay
- Determine fluid distribution in a field and identify reservoir compartments
- Estimate field reserves through the life of a field
- Characterize carbonate and clastic rocks by productivity
- Construct geologic reservoir models
- Determine field drive mechanism
- Apply seismic analysis to reservoir development
- Determine depositional characteristics to optimize development
- Compile a development plan
- Use economic techniques to evaluate different development plans

Course Content

- Characteristics that impact field development
- Determining recoverable hydrocarbons
- Reservoir fluid properties
- Influence of capillarity reservoirs
- Volumetric reserve estimation and calculation
- Stratigraphic influence on production
- Controls on reservoir rock, barriers, and hydrocarbon distribution
- Describing reservoir rock in carbonate and clastic rocks
- Determining recoverable hydrocarbons
- The impact of drive mechanism
- Seismic applications
- Development drilling: optimizing hydrocarbon recovery
- Economic impact on field development
- Subdividing the reservoir into working units
- Reservoir pore space configurations
- Building a static reservoir model using deterministic and stochastic techniques
- Key factors affecting the development of fractured reservoirs
- Impact on barriers on field development
- Secondary and tertiary field development
- Rejuvenating old marginal fields

Product Details

Categories: Upstream

Disciplines: Geology

Levels: Intermediate

Product Type: Course

Formats Available: In-Classroom

Instructors: PetroSkills Specialist Peter Bartok Andrew Harper John Sneider

In-Classroom Format

12 Aug '24 16 Aug '24 -	Course	In-Classroom (in London)	$5,585.00

4 Nov '24	8 Nov '24	-	Course	In-Classroom (in Houston)	$4,810.00